AQUAGAUGE™ Installation and Operating Instructions.

ELECTROSENSE TECHNOLOGIES

Installation Details (Data Logger Differential Pressure Sensor Model)

Lower the pressure sensor through an appropriate opening in the tank above the water level and allow the sensor to sink to the bottom of the tank. The data logger and transmitter case does not need to sit on top of the tank however it should be mounted in a position where the antenna is not obstructed. Excess cable can be pushed into the tank.

Operation

The tank logger/ transmitter unit normally accepts four AA batteries. These can be installed by unscrewing the lid on the transmitter. This combination of batteries (6V) gives an output power which is within most allowable limits specified by local and overseas broadcasting regulations for an operating frequency of 434 MHz. The transmitter unit will send data every 10 seconds after powering up if it has been selected in the data logger setup procedure and the logger has been activated. Pressure sensor readings are automatically compensated for changes in atmospheric pressure and data is converted to a water depth reading in cm.

To use the receiver/display unit:

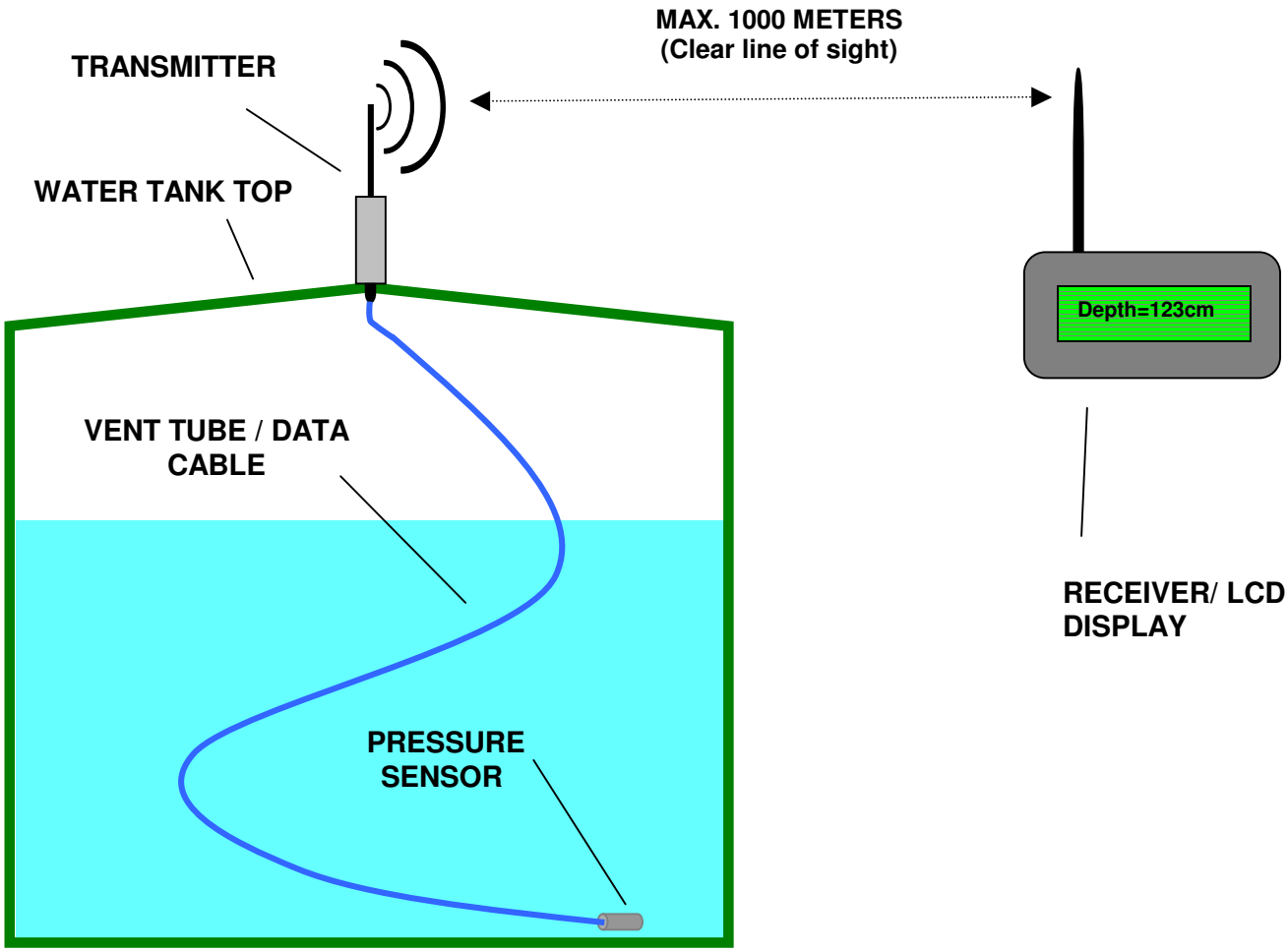
- Connect the plug on the lead from the AC-DC wall transformer to the socket on the side of the display. Plug the wall transformer into the mains AC supply, switch on and press the ON/OFF key .
- The unit should display the message "AQUAGAUGE loading…" followed by "Waiting for data" and then the depth in centimeters for up to 4 sensors
- Pressing the DISPLAY key will show data for a second set of up to 4 sensors.
- The receiver unit is also supplied with an internal 4 x AAA battery holder enabling the receiver to be used in a portable mode. This is particularly useful for moving around when trying to establish a fixed location that has good RF reception. It should be noted that the display will retain a reading for 4 minutes if no new data is received, therefore when testing for the best reception range and location the receiver should periodically be switched off and on.

Maintenance and Operating Problems

Provided that the batteries are charged and the RF receiver unit is within an acceptable distance from the transmitter then AQUAGAUGE™ sensor/transmitter units should operate continuously and reliably. Common causes of problems include low batteries in the receiver or transmitter unit and electrical or RF interference from external sources. The receiver and transmitter need to be separated by a distance of about 3 meters otherwise temporary saturation of the receiver may occur and result in poor reception.

© Electrosense Technologies 2011

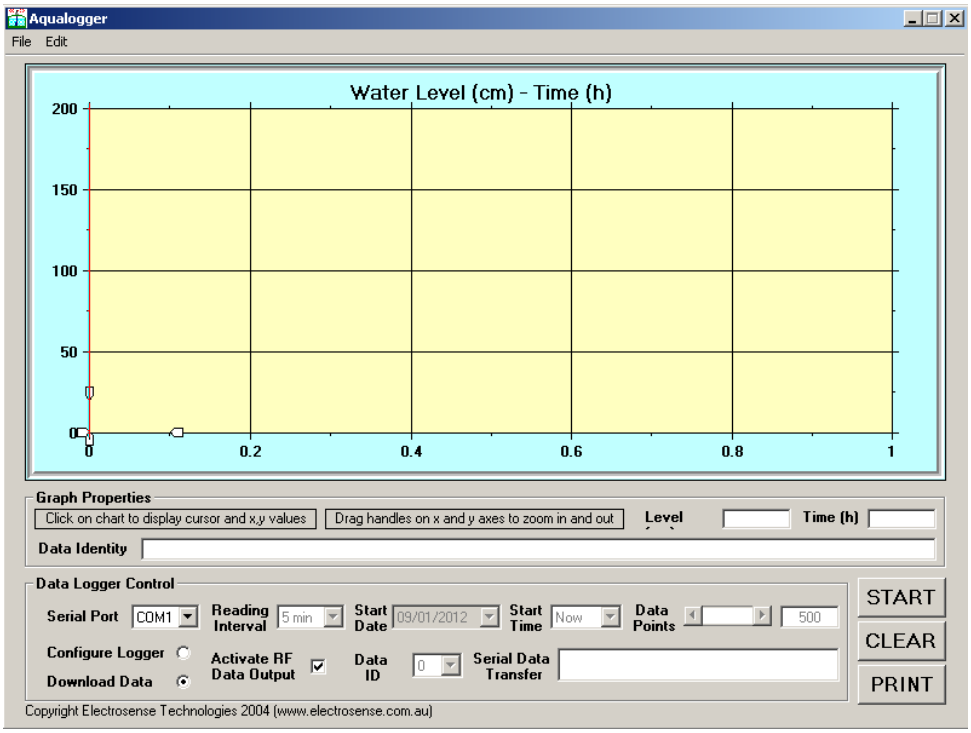
INSTALLATION DIAGRAM



© Electrosense Technologies 2011

WATER LEVEL SENSOR /DATA LOGGER /RF TRANSMITTER

RECEIVER/DISPLAY



DATA LOGGING AND CHARTING SOFTWARE

© Electrosense Technologies 2011